Contract Proposal for
GIS Products and Services
for Washington County, Indiana
November, 2001

WTH Technology (the "Company") wishes to provide the Washington County Board of Commissioners (the "Client") with new software and map development services to enhance the county's existing Geographical Information System (GIS). The following defines the scope of products and services to be offered by the Company and the compensation to be paid by the Client.

1. **Summary:** The following is a summary of this proposal. Each item is described in more detail in the sections below.

   a) The Company will upgrade the Client's existing Citymap software to the latest version, called Thinkmap, which is capable of displaying the background digital ortho-photography.

   b) The Company will convert the existing information contained in the 911 Department's electronic map (Citymap) into the county's new GIS. This will include relocating all addresses, roads, and all other layers on the 911 Department's existing map so that they line up with the USGS digital ortho photography.

   c) The Company will include a road segmentation data layer, the latest bridge inventory and the conversion of the existing parcel data into a digital format. The Company will also utilize the already digitized USDA soils data and fit this to the finished map, using visual control points on the aerial photography.

   d) The Company will provide technical support for 10 licensed users of the software, synchronize data between users, and provide an off-site backup on a regular basis. Upgrades to the software will be automatically installed onto the Client's computers as they become available.

   e) The cost of these products and services will be $123,100 plus $500 Monthly maintenance.

2. **Map and Data Development:** The finished Geographical Information System will consist of several data sets. All of the following data sets are included. All layers are positioned on the map to line up with each other and with the world.

   a) <u>Digital USGS Topo Maps</u>: Digital USGS topo maps will be included. This can be utilized for reference information.

   b) <u>Aerial Photography</u>: 1997-98 digital ortho photos will be included as a background raster image on the map. These photos will come from the USGS and have a 1 meter per pixel resolution and have been orthogonally rectified to remove relief displacement so that ground features are displayed in their true ground position.

c) <u>Section Lines</u>: Section lines are added based on USGS Quad Maps. The lines will be fit and adjusted to match obvious landmarks in the photography such as fence lines, roads etc.

d) <u>Roads</u>: The Company will re-position each road, highway and railroad to fit on the new digital ortho photography. All of the data currently in the GIS will be kept in the conversion of the data from Citymap to Thinkmap. It is recommended that the Client also provide the Company with a copy of their Master Street Address Guide, or MSAG, so that all road name spellings can be checked to exactly match those used in the Client's E911 system

e) <u>Streams, Lakes, and Rivers</u>: All waterways currently in the map will be re-positioned to the digital ortho photos. All of the information currently on the map will be translated to the new map.

f) <u>Landmarks and Boundaries</u>: Any towns, place names, points of interest, emergency response boundaries, and other similar information in the GIS will be redrawn onto the county's new GIS base map.

g) <u>Addresses</u>: The Company will re-plot each address point onto the new GIS base map. Any existing driveways will also be redrawn. The new location of each address will be based on the location of buildings visible in the new digital ortho photography. There will be cases when it is not obvious which address goes to which building on the photography. In these cases, the Company will place the address point on the closest or most obvious structure.

h) <u>Bridge Inventory</u>: The location of each county bridge will be pinpointed on the map based on the latest inspection submitted to the state. Each bridge will be linked to a data sheet where detailed specifications and notes can be recorded. The Company will populate the database with information provided directly from INDOT. The Company will obtain the latest digital database from the INDOT. Any additional information such as photographs and sketches of each bridge will also be included in the database if provided by the Client. The Company will add any past inspection databases to the map if the Client can provide the source.

i) <u>Road Segmentation</u>: A detailed layer that overlays the road layer and includes the state inventory number, to and from road intersection names, segment length etc... These road segment features will be a continuous segment that will change at noted changes based on the inventory map. If an existing road does not have a state number, a new number will be added that will be clearly different that the state number.

j) <u>Property Lines</u>: The Company will digitize the Client's existing plat maps, include any blowup pages and subdivision maps and tile them all together into one continuous map. The Company will align each digitized plat into its visual location on the finished map using visual control points on the aerial photography. The Company will correct the location of each plat page to make them line up with the newer ortho-rectified and with each other. The finished map will show all township and range lines, section lines, platted subdivisions boundaries, subdivision lot lines, and parcel lines.

k) <u>Soil Classifications</u>: The Company will take the completed USDA digitized soils data and load this into the Think Map system. The Client will need to provide the Company with the coordinate system of the soils data.

3. **Description of Software:** The Software to be provided with this contract is called "Think Map". A compiled Microsoft Access database is also included for each licensed user. The Client will need to have Microsoft Access 2000 already installed on their computers where the road inventory and bridge inventory will be viewed.

a) The following is a summary of the functionality included in the software:
   - The software provides various zooming and panning tools to make it possible to easily view any area of the map at any scale.
   - Locate any named objects or location on the map by selecting them from an alphabetical index or by pressing the Map button from any data sheet.
   - Users can query the database for a set of records matching any criteria based on any combination of field values and then show the results on the map.
   - Point and click on any object on the map to view the data linked to that object (i.e. bridge, road, address, etc)
   - Measure any distance or area.
   - Layers can be turned on and off independently to customize the appearance of the map at each workstation.
   - Import or Export data from and to other mapping applications.
   - E911 interface to provide automatic pop-up map with each E911 call.
   - Editing tools are included to assist in adding or changing any information.
   - GPS interface.
   - Parcel assessment tool that will walk the user through the assessment process. This tool will assess the parcel and soil layers in conjunction with a user added land use area to determine the parcel assessment. This assessment calculates the acreage of each portion of the parcel. This requires a parcel, soil and land use layer on the map.

b) Hardware Requirements. The software can be installed and ran on any computer provided by the Client that meets the following minimum requirements:
   - Windows 95, 98 or NT.
   - Microsoft Access 2000 is required for the bridge and road segmentation. Older versions of this software are not compatible with Thinkmap.
   - 128 Megabytes of memory (256 megs or higher recommended for computers that will use the parcel assessment tool).
   - 3 Gigabytes of hard disk space. More disk space will be needed if higher resolution photography is ordered.
   - 15" SVGA color monitor capable of displaying 16 bit color at 800 X 600 resolution or better. (21" recommended)
   - Keyboard and mouse
   - Modem and/or Internet Access. (Required for data synchronization, backup, and support)

Installation and Coaching:

a) Use of Software: The software will be licensed for use on 10 individual work stations located in the county and used for county government purposes only. A list of these initial 10 users must be provided to the Company prior to installation.

The software may be installed on a network of computers but "use" of the software is limited to those users agreed upon prior to installation.

b) Setup and Coaching: When the project is completed the Company will install the software and data files into each department's existing computers and setup each workstation with a strategy of sharing data with the other departments (see Customer Service section below). Note that no computer hardware is included with the purchase of this system. Company will provide training for the first six months based on our "coaching" concept. Coaches are made available to the users (via the phone or in person) on demand for any purpose utilizing the Think Map software.

c) 911 Interface: The Company will interface the mapping software with the Client's E911 system so that a map will automatically be displayed with each 911 call showing the location of the caller. To do this, the Client's 911 provider must make available a local connection point that provides an ALI stream of data with each 911 call. The Client's 911 provider may have additional charges for their part of this interface.

5. Customer Service:

a) Toll Free Telephone Support: As part of this customer service agreement, business hours phone support will be provided for one representative from each department. Phone support will include answering questions regarding the use of the software and making changes to the system configuration to adapt to the Client's changing needs.

b) Software Upgrades: Any enhancements made to the Think Map system during the life of the maintenance agreement will be automatically uploaded to the Client's computer(s) as they become available.

c) Data Synchronization: This service will make it possible for departments not connected to a central network (i.e. remote users) to share data with other departments. Remote users who have internet access on their computer will be able to automatically dial into the Company's system and send or receive map updates. With this in place, any user responsible for maintaining one or more layers can upload their changes to a remote server and all other users will be able to download these layers so that they are up to date each morning.

d) Off Site Data Back-up: The Company will maintain a "back-up" of the Client's Map Data off-site of the county. In case of computer data loss, this data back-up will be provided to the county at no charge.

e) Additional map development: As additional uses for the GIS are realized by the Client the need will arise to add additional data sets, or layers, to the map. The Company will quote a price for these additions as they are requested.

f) Additional users: This contract provides software for use on 10 computers. The Company will provide licenses to the Client for additional users for a cost of $500 per computer. This price is guaranteed for the 12 months following the signing of this contract.

6. **Price and Payment:** The above products and services will be provided for a price of $123,100 plus $500 Monthly customer service. (Price is based on 18,100 parcels. There will be a $5.50 cost per parcel for parcels exceeding 10 percent over the 18,100. There is no charge for additional parcels within the 10 percent of 18,100).

a) Phase I: $35,000 Payment. To be delivered 30 days after the signing of this contract. This includes the delivery of the software and base map including USGS digital aerial photography, roads, railroads, water, bridges, political boundaries, along with topography for the entire County. This payment is due upon receipt of the WTH invoice.

b) Phase II: $22,025 Payment. To be delivered 30 days after the delivery of Phase I. This includes the delivery of the road segmentation and addressing for the entire County. This payment is due upon receipt of the WTH invoice.

c) Phase III: $22,025 Payment. Phase III will be delivered 30 days after delivery of Phase II. This includes the delivery of four (4) townships of parcel and soils data. This payment is due upon receipt of the WTH invoice.

d) Phase IV: $22,025 Payment. Phase IV will be delivered 30 days after delivery of Phase III. This includes the delivery of four (4) townships of parcel and soils data. This payment is due upon receipt of the WTH invoice.

e) Phase V: $22,025 Payment. Phase V will be delivered 30 days after delivery of Phase IV. This includes the delivery of the final five (5) townships of parcel and soils data and coaching. This payment is due upon receipt of the WTH invoice.

f) Customer Service: The monthly customer service fee will begin 30 days after the delivery of Phase V. The monthly customer service is $500 per month for 10 users, in advance, to be payable quarterly, semi-annually or annually as desired by the customer. This covers all services described in section 5 above.
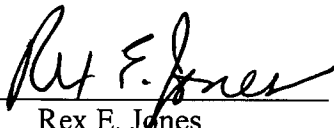
Contract Performance Schedule

Phase	Delivery Date from Contract Signing	Amount	Invoice Date from Contract Signing	Description
Phase I	30 days	$35,000	30 days	Software + Layers in contract
Phase II	60 days	$22,025	60 days	Address + Road Segmentation
Phase III	90 days	$22,025	90 days	4 townships of parcel & soil data
Phase IV	120 days	$22,025	120 days	4 townships of parcel & soil data
Phase V	150 days	$22,025	150 days	Final 5 townships of parcel & soil data
Total GIS conversion cost		$123,100		
Maintenance & Support	N/A	$6,000	180 days	Customer Service per year for 10 users
Total first year payment		$129,100		
Notes:				
1. All days refer to the days after the contract has been signed.				
2. Maintenance & Support fee begins 30 days after the delivery of Phase V.				

IN WITNESS WHEREOF, the parties have executed this Agreement as of this 5th day of _Nov._ , 2001.
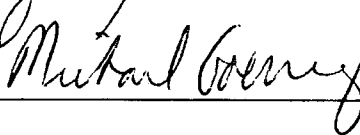
Company:
WTH Technology, Inc.

Client:
Washington County
Board of Commissioners

By: _Rex E. Jones_ (signature)
       Rex E. Jones

By: _Dale McKinley_ (signature)

By: _Jerry Roberts_ (signature)

Title: _____President_____

By: _Michael Goeney_ (signature)

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